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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/575,293	04/12/2006	Becky Bossidan	2003005503	1337

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HEWLETT PACKARD COMPANY  
P O BOX 272400, 3404 E. HARMONY ROAD  
INTELLECTUAL PROPERTY ADMINISTRATION  
FORT COLLINS, CO 80527-2400

EXAMINER
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RODEE, CHRISTOPHER D

ART UNIT	PAPER NUMBER
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1795

NOTIFICATION DATE	DELIVERY MODE
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03/04/2008

ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

JERRY.SHORMA@HP.COM  
mkraft@hp.com  
ipa.mail@hp.com

<b>Office Action Summary</b>	<b>Application No.</b> 10/575,293	<b>Applicant(s)</b> BOSSIDAN ET AL.	
	<b>Examiner</b> Christopher RoDee	<b>Art Unit</b> 1795	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on 12 April 2006.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-23 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-23 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>4/12/06 11/21/07</u> .  | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

### ***Information Disclosure Statement***

The information disclosure statement filed 12 April 2006 fails to comply with 37 CFR 1.98(b)(1), which requires each U.S. patent listed in an information disclosure statement to be identified by inventor, patent number, and issue date. The information disclosure statement also fails to comply with 37 CFR 1.98(b)(4), which requires each foreign patent or published foreign patent application listed in an information disclosure statement to be identified by the country or patent office which issued the patent or published the application, an appropriate document number, and the publication date indicated on the patent or published application. The information disclosure statement has been placed in the application file, but the information referred to therein has not been considered.

### ***Claim Objections***

Claims 5, 6 and 14 objected to because of the following informalities: the notation for the color index in these claims should be 15:3 and 15:4, respectively, in claims 5 and 6. Claim 14 contains a typographical error in the word "meth" for methacrylic acid. Appropriate correction is required.

### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

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Claim 15 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 15 defines the carbon black as being "Nipex 150". This appears to be a trademark or tradename for a certain commercially available carbon black. The characteristics of this carbon black are not defined in the claims or in the specification. Although the Nipex 150 carbon black is disclosed there is no disclosure of its composition, properties, or characteristics to render the claims definite (see spec. p. 3, l. 13-14). See *Ex parte Simpson*, 218 USPQ 1020 (Bd. App. 1982).

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-7, 11-13, 18, and 22 are rejected under 35 U.S.C. 102(b) as being anticipated by Sugizaki *et al.* in US Patent 6,120,959 considered with Chemical Abstracts Registry #147-14-8.

Sugizaki discloses a dry black toner comprising a binder resin, and specific concentrations of carbon black, a magenta pigment, a cyan pigment, and a yellow pigment. Useful cyan pigments include CI Pigment Blue 15, 15:2, and 15:3, which as seen in the Chemical Abstracts citation is a phthalocyanine pigment. The Chemical Abstracts citation also shows that CI Pigment Blue 15, 15:2, 15:3, and 15:4 all describe the same compound.

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Consequently, the disclosure of any one of these (such as Pigment Blue 15:3 also discloses Pigment Blue 15:4). The various colored pigments are added to the black toner having carbon black in order to increase the black color density, which would decrease the chroma of the image. It thus appears that the produced toners in Sugizaki inherently have a chroma as specified in claims 11-13. The reference produces images using the toner in a commercially available apparatus in the examples, and, as discussed in the Background of the Invention, the toner image is formed through a process of forming an electrostatic latent image, developing that image, transferring, and fixing to a receiver paper (col. 1, l. 11-25).

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 14 is rejected under 35 U.S.C. 103(a) as being unpatentable over Suzuki *et al.* in US Patent 5,538,828 in view of Sugizaki *et al.* in US Patent 6,120,959.

Suzuki discloses a toner comprising an ethylene acylic acid copolymer and a carbon black colorant (see Example 15; col. 6, l. 15). The reference does not disclose a mixture of pigments with the carbon black colorant, but Suzuki teaches that colored pigments are added to the black toner having carbon black in order to increase the black color density. Specifically disclosed colorants are a magenta pigment, a cyan pigment, and a yellow pigment.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to use the combination of pigments disclosed by Sugizaki in the toner of

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Suzuki because Suzuki teaches the formation of black toners with carbon black and Sugizaki teaches that a magenta pigment, a cyan pigment, and a yellow pigment are added to the black toner having carbon black in order to increase the black color density.

Claims 8-10, 16, 17, 19-21, and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Felder *et al.* in US Patent 5,304,451 in view of Sugizaki *et al.* in US Patent 6,120,959.

Felder teaches the formation of dry toner for addition to liquid carrier to replenish a liquid developer. The dry toner comprises a urethane modified polyester resin blended with a colorant (col. 6, l. 62 – col. 7, l. 25). The reference teaches that a large number of different colorants can be used in the toner, including carbon black, yellow, cyan, and magenta pigments (Table in cols. 7 & 8). The produced dry toner is added to a liquid developer (col. 32-35). Various liquid carrier hydrocarbons are disclosed for the liquid developer (col. 10, l. 45 – col. 11, l. 7) as well as charge directors (col. 11, l. 8-61). The conventional imaging steps of forming an electrostatic latent image, developing that image, transferring, and fixing to a receiver are disclosed (col. 1, l. 11-23).

Felder does not disclose the combination of carbon black and pigments as required in the instant claims, but, as discussed above, Sugizaki teaches that a magenta pigment, a cyan pigment, and a yellow pigment are added to the black toner having carbon black in order to increase the black color density.

With respect to claims 16, 17, 19, and 23, it would have been obvious to one having ordinary skill in the art at the time the invention was made to use the combination of pigments disclosed by Sugizaki in the toner of Felder because Felder teaches the formation of black toners with carbon black and Sugizaki teaches that a magenta pigment, a cyan pigment, and a

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yellow pigment are added to the black toner having carbon black in order to increase the black color density.

The cited references do not disclose the addition of a violet pigment as part of the pigment mixture to increase the black color density of the toner image, but Sugizaki does teach the concept that a combination of colorants that together form a black color can be used to increase the black density. The use of any additional pigments or other combination of pigments known in the art which can form a black color would be an obvious expedient to the artisan because this combination would be expected to produce the same result by the same concept (i.e., pigment mixing). Felder teaches various pigments known in the art for specific colors, such as Violet 23 (i.e., Indofast® Violet; col. 8, l. 22) as a known violet pigment. The use of violet with other known pigments to give a black color (e.g., orange, violet, and green) would have been obvious for the artisan familiar with color mixing in order to improve the color density of the black toner.

### ***Conclusion***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christopher RoDee whose telephone number is 571-272-1388. The examiner can normally be reached on Monday to Thursday from 5:30 to 4:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mark Huff can be reached on 571-272-1385. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Christopher RoDee/  
Primary Examiner  
Art Unit 1795

cdr  
1 March 2008